

REMARKS/ARGUMENTS

Claims 1-25 are pending in this application.

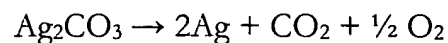
Claims 1, 3-5, 10-12, 14, 20 and 23 stand rejected under 35 U.S.C. §102(a) over Chinese Patent No. 1480584 (CN 1480584). This rejection is respectfully traversed.

CN 1480584 does not anticipate the present claims as the presently claimed process differs from that disclosed in the reference. The Patent Office concludes that the reference discloses mixing various bases including sodium hydroxide in a silver nitrate solution, mixing a second solution containing ethanol as a solvent, and combining the two solutions, followed by an oxidizing step using hydrogen peroxide, to prepare a material containing silver nanoparticles.

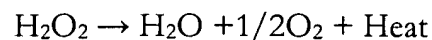
However, the cited reference makes nanosilver by reduction which is basically the standard method for making nanosilver particles. As stated in the "Background of the Invention" section on page 1 of the present application, chemical reduction currently is a method for synthesizing nanosized metal particles. However, use of reducing agents can easily create contamination.

Glucose is the reducing agent used in CN 1480584 as shown on page 6. The use of peroxide for oxidation in CN 1480584 is simply to make AgO which is obtained **after** nanosilver has already been formed by reduction. Therefore, the method disclosed in CN 1480584 does not meet the element of claim 1 which states that an effective amount of at least one peroxide must be added to **form** nanosized metal particles. In CN 1480584, the peroxide addition does not form the nanosized metal particles.

For example, in accordance with an embodiment disclosed in the specification, H₂O₂ was added to the solution containing Ag₂CO₃, which allows the following reaction to occur:

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Above reaction needs heat for thermal decomposition of Ag_2CO_3 . This heat is supplied by decomposition of hydrogen peroxide (H_2O_2):



Again, this step allows formation of the nanosized metal particles which do not have to undergo difficult further processing for separation.

Since CN 1480584 is just the old reduction method of making nanosilver particles each and every element of the present claims is not taught by CN 1480584. Applicants therefore respectfully request withdrawal of the rejection under 35 USC § 102.

The Office Action rejects claims 2, 6, 17-19, 22, 24 and 25 under 35 U.S.C. §103(a) over Chinese Patent No. 1480584. This rejection is respectfully traversed.

The Examiner makes the obviousness rejection to provide the missing elements: ratio of silver nitrate to solvent as set forth in claim 2, the specific solvents of claim 6, the temperature of claims 17 and 18, the separation step of claim 19, the two-step procedure of adding peroxide as set forth in claim 22, and the particle diameters of claims 24 and 25.

Applicants' above argument for the anticipation applies here as well for obviousness. As pointed out above, the process of CN 1480584 is fundamentally different from the process claimed by claim 1 and CN 1480584 does not teach or suggest the claimed elements. Applicants respectfully request withdrawal of the rejection under 35 USC § 103(a).

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CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **Daniel Y.J. Kim**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
FLESHNER & KIM, LLP

Daniel Y.J. Kim
Registration No. 36,186
Daniel S. Kim
Registration No. 51,877

Correspondence Address:

P.O. Box 221200

Chantilly, Virginia 20153-1200

(703) 766-3701 DYK/dak

Date: October 10, 2006

Please direct all correspondence to Customer Number 34610

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